

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A method of fabricating a ~~non-luminescent multi-cell substrate composite microarray slide~~ useful for carrying a microarray of biological polymers comprising the acts steps of:

a) providing a non-porous substrate;

b) providing a non-luminescent microporous membrane formed by a phase inversion process, the process comprising the acts of:

i) formulating a casting dope comprising a solvent, ~~one or more non-solvents, opaque solids, and polyamide(s); a non-solvent, an opaque solid and a phase inversion polymer capable of forming a phase inversion membrane;~~

ii) mixing and blending the casting dope to cause dissolution of the phase inversion polymer and opaque solids therein;

~~producing an opaque solids filled phase inversion casting dope;~~

iii) casting a thin portion of the ~~opaque solids-filled phase inversion casting dope on a solid substrate;~~ and

iv) quenching the casted ~~thin portion of the opaque solids-filled phase inversion casting dope such that phase inversion occurs to form a substrate non-luminescent microporous membrane;~~

~~providing a surface treatment;~~

c) applying the ~~a~~ surface treatment to the non-porous substrate ~~to provide the non-porous substrate with a surface capable of covalently bonding to the non-luminescent microporous membrane;~~ and

~~intermingling-contacting~~ the non-porous substrate having the surface treatment with the non-luminescent microporous membrane such that the non-porous substrate is sufficiently covalently bonded to the non-luminescent microporous membrane ~~wherein the combination produced thereby is useful in microarray applications to provide the non-luminescent composite microarray slide substrate useful for carrying a microarray of biological polymers.~~

2. (canceled)

3. (Currently amended) The method of claim 1 wherein, the surface treatment comprises treatment with a 3-aminopropyl triethoxysilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

4. (Currently amended) The method of claim 1 wherein, the non-porous substrate is selected from the group comprising consisting of: glass, biaxially oriented polyethylene terephthalate (bo-PET)Mylar, ceramic, acrylic, polypropylene, polycarbonate, polysulfone, polyamide and/or polyaramid.

5. (original) The method of claim 1 wherein, the non-porous substrate is glass.

6. (original) The method of claim 1 wherein, the non-porous substrate is a polyester.

7. (Currently amended) The method of claim 1 wherein, the non-porous substrate is biaxially oriented polyethylene terephthalate (bo-PET)Mylar.

8. (Currently amended) The method of claim 7 wherein, the surface of the biaxially oriented polyethylene terephthalate (bo-PET)Mylar is oxidized with sulfuric acid or corona discharge to enable it the biaxially oriented polyethylene terephthalate (bo-PET)Mylar to bond to a polyamido polyamine epichlorohydrin polymer.

9. (Currently amended) The method of claim 1 wherein the opaque solids is are carbon particles.

10. (Currently amended) The method of claim 49 wherein the carbon particles are less than 5 microns in size.

11. (Currently amended) The method of claim 49 wherein the carbon particles are substantially uniformly distributed throughout the polyamide support phase inversion polymer capable of forming a phase inversion membrane.

12. (Currently amended) The method of claim 49 wherein the carbon particles are partially incorporated into the polyamide support phase inversion polymer capable of forming a phase inversion membrane.

13. (Currently amended) The method of claim 49 wherein the carbon particles are substantially wholly incorporated into the polyamide support phase inversion polymer capable of forming a phase inversion membrane.

14. (Currently amended) The method of claim 1 wherein the phase inversion polymer capable of forming a phase inversion membrane polyamide support is charge-modified.

Claims 15-44 (cancelled)

45. (Currently amended) The method of claim 1 wherein the phase inversion membrane polymer capable of forming a phase inversion membrane is selected from the group consisting of:

nylon 6,6, nylon 4,6, nylon 6, polysulfone, polyethersulfone, and polyvinylidenediflouride (PVDF).

Claims 46-57 (cancelled)

58. (New) The method of claim 1 wherein, the surface treatment comprises treatment with 3-aminopropyl triethoxysilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

59. (New) The method of claim 1 wherein, the surface treatment comprises treatment with (10-carbomethoxydecyl) dimethylchlorosilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

60. (New) The method of claim 1 wherein, the surface treatment comprises treatment with 3-glycidoxypolytrimethoxysilane.

61. (New) The method of claim 1 wherein, the surface treatment comprises treatment with N-(2-aminoethyl)-3-aminopropyltrimethoxysilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

62. (New) The method of claim 1 wherein, the surface treatment comprises treatment with 2-(3,4-epoxycyclohexyl)-ethyltrimethoxysilane.